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| 10/763,969 | 01/23/2004 | Lennart Andersson | 0119-113 | 7902 |
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| POTOMAC PATENT GROUP PLLC P. O. BOX 270 FREDERICKSBURG, VA 22404 | | | EXAMINER AMINZAY, SHAIMA Q | |
| | | | ART UNIT 2618 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

tammy@ppglaw.com

Office Action Summary**Application No.**

10/763,969

Applicant(s)

ANDERSSON ET AL.

Examiner

SHAIMA Q. AMINZAY

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/23/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/23/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/CDC)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This is the first office action in response to application No. 10/763,969 filed 1/23/2004 (*Publication: 20050085255*), as originally filed claims 1 through 30 are presented for examination.

Note: *In this office action the punctuation colon (":") is used as separation between selected lines and paragraph/column (e.g. 2:1-5 means paragraph or column 2, and lines 1-5).*

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language..

1. Claims 1-30 are rejected under 35 U.S.C. 102(c) as being anticipated by Oh (Oh, et al., U.S. Publication No. 2004/0137,860).

Regarding claim 1, Oh discloses a method for controlling power in a communication

system (e.g., Fig. 1-2, 7, 3:1-4, 27:1-25, 155:1-15, power control communication system (100, 200)), comprising: determining a block error rate (BLER) based on data blocks received on a first transport channel and data blocks of at least a second transport channel (e.g., Fig. 1-2, 7, 27:1-25, 36:5-16, the “transport channels commonly used for data transmission include a dedicated traffic channel (DTCH) and a dedicated control channel (DCCH)” the BLER is configured according to the data received via transport channel); and determining a reference signal-to-interference (SIR) value corresponding to the first transport channel based on the BLER and a target BLER for the first transport channel (e.g., Fig. 1-2, 7, 101:1-16, 103:1-8, 155:1-15, according to target BLER of a transport channel indicating target (reference) SIR).

Regarding claim 7, Oh discloses an apparatus for controlling power in a communication system (e.g., Fig. 1-2, 7, 31:1-5, 153:1-14, the user equipment (120) (apparatus) controlling power in communication system (100 or 200)), comprising: logic that determines a BLER based on data blocks received on a first transport channel and data blocks of at least a second transport channel (e.g., Fig. 1-2, 7, 27:1-25, 155:1-15, 160:1-12, the logic (e.g. PLDs) configures “transport channels commonly used for data transmission include a dedicated traffic channel (DTCH) and a dedicated control channel (DCCH)” the BLER is configured according to the data received via transport channel); and logic that determines an SIR value corresponding to the first transport channel based on the BLER and a target BLER for the first transport channel (e.g., Fig. 1-2, 7, 101:1-16, 103:1-8, 155:1-15, 160:1-12, the logic (e.g. PLDs) configures

according to target BLER of a transport channel indicating SIR).

Regarding claim 13, Oh discloses a method for controlling power in a communication system (e.g., Fig. 1-2, 7, 3:1-4, 27:1-25, 155:1-15, power control communication system (100, 200)), comprising: determining a common BLER of data blocks received on a plurality of transport channels (e.g., Fig. 1-2, 7, 27:1-25, 36:5-16, the "transport channels commonly used for data transmission include a dedicated traffic channel (DTCH) and a dedicated control channel (DCCH)" the BLER is configured according to the data received via transport channel); determining a common target BLER for the plurality of transport channels (e.g., Fig. 1-2, 7, 101:1-16, 103:1-8, 118:1-11, 155:1-15, configuring the target BLER used by all (common) transport channels); and determining a reference SIR value corresponding to the plurality of transport channels based on the common BLER and the target BLER (e.g., Fig. 1-2, 7, 101:1-16, 103:1-8, 155:1-15, according to target BLER of a transport channel indicating target (reference) SIR), said reference SIR being used for controlling power (e.g., Fig. 1-2, 7, 101:1-16, 103:1-8, 155:1-15, the target (reference) SIR is being used to control power).

Regarding claim 14, Oh discloses an apparatus for controlling power in a communication system, comprising (e.g., Fig. 1-2, 7, 31:1-5, 153:1-14, the user equipment (120) (apparatus) controlling power in communication system (100 or 200)): logic that determines a common BLER of data blocks received on a plurality of transport channels (e.g., Fig. 1-2, 7, 101:1-16, 103:1-8, 118:1-11, 155:1-15, 160:1-12, the logic

(e.g. PLDs) configures the target BLER used by all (common) transport channels is received); logic that determines a common target BLER for the plurality of transport channels (e.g., Fig. 1-2, 7, 101:1-16, 103:1-8, 118:1-11, 155:1-15, 160:1-12, the logic (e.g. PLDs) configures the target BLER used by all (common) transport channels is transmit or transport); and logic that determines a reference SIR value corresponding to the plurality of transport channels based on the common BLER and the target BLER, said reference SIR being used for controlling power (e.g., Fig. 1-2, 7, 101:1-16, 103:1-8, 155:1-15, 160:1-12, the logic (e.g. PLDs) configures the target (reference) SIR is being used to control power).

Regarding claim 15, Oh discloses a method for controlling power in a communication system *(e.g., Fig. 1-2, 7, 3:1-4, 27:1-25, 155:1-15, power control communication system (100, 200))*, comprising: determining a BLER of data blocks received on a transport channel *(e.g., Fig. 1-2, 7, 101:1-16, 103:1-8, 155:1-15, configuring the BLER of data received via transport channel)*; estimating a block rate (BLR) of the data blocks received on the transport channel *(e.g., Fig. 1-2, 7, 101:1-16, 103:1-8, 154:1-11, 155:1-15, estimating SIR block ratio (rate) and configuring the BLER of data received via transport channel)*; and determining a reference SIR value corresponding to the transport channel based on the BLER, a target BLER *(e.g., Fig. 1-2, 7, 101:1-16, 103:1-8, 155:1-15, according to target BLER of a transport channel indicating target (reference) SIR)*, and the estimated BLR *(e.g., 155:1-15, estimating SIR block ratio (rate))*, said reference SIR being considered for controlling power *(e.g., Fig. 1-2, 7, 101:1-16, 103:1-8, 155:1-*

15, the target (reference) SIR is being used to control power).

Regarding claim 22, Oh discloses an apparatus for controlling power in a communication system (e.g., Fig. 1-2, 7, 31:1-5, 153:1-14, the user equipment (120) (apparatus) controlling power in communication system (100 or 200)), comprising: logic that determines a BLER of data blocks received on a transport channel; logic that estimates a BLR of the data blocks received on the transport channel (e.g., Fig. 1-2, 7, 101:1-16, 103:1-8, 154:1-11, 155:1-15, 160:1-12, estimating SIR block ratio (rate) and configuring the BLER of data received via transport channel); and logic that determines a reference SIR value corresponding to the transport channel based on the BLER, a target BLER (e.g., Fig. 1-2, 7, 101:1-16, 103:1-8, 155:1-15, 160:1-12, the logic (e.g. PLDs) configures according to target BLER of a transport channel indicating target (reference) SIR), and the estimated BLR, said reference SIR being considered for controlling power (e.g., Fig. 1-2, 7, 101:1-16, 103:1-8, 155:1-15, 160:1-12, the logic (e.g. PLDs) configures the target (reference) SIR is being used to control power).

Regarding claim 29, Oh discloses a method for controlling power in a communication system (e.g., Fig. 1-2, 7, 3:1-4, 27:1-25, 155:1-15, power control communication system (100, 200)), comprising: adjusting a reference SIR value downward incrementally (e.g., 75:1-17, 76:1-8, 124:1-11, adjusting the target (reference) SIR using down-step (downward)); monitoring at least one transport channel associated with the reference SIR for block errors (e.g., 76:1-8, 155:1-15, controlling the transport channel related to the

SIR for BLER block error); and setting an initial reference SIR value for each of the at least one transport channels to the incrementally adjusted reference SIR value when a predetermined number of errors are received cumulatively on any of the at least one transport channels (e.g., 75:1-17, 76:1-8, 124:1-11, the initial value of the SIR for the transport channels is being adjusted).

Regarding claim 30, Oh discloses an apparatus for controlling power in a communication system (e.g., Fig. 1-2, 7, 31:1-5, 153:1-14, the user equipment (120) (apparatus) controlling power in communication system (100 or 200)), comprising: logic that adjusts a reference SIR value downward incrementally (e.g., 75:1-17, 76:1-8, 124:1-11, 160:1-12, the logic (e.g. PLDs) configures adjusting the target (reference) SIR using down-step (downward)); logic that monitors at least one transport channel associated with the reference SIR for block errors (e.g., 76:1-8, 155:1-15, 160:1-12, the logic (e.g. PLDs) configures controlling the transport channel related to the SIR for BLER block error); and logic that sets an initial reference SIR value for each of the at least one transport channels to the incrementally adjusted reference SIR value when a predetermined number of errors are received cumulatively on any of the at least one transport channels (e.g., 75:1-17, 76:1-8, 124:1-11, 160:1-12, the logic (e.g. PLDs) configures the initial value of the SIR for the transport channels is being adjusted).

Regarding claims 2 and 8, Oh teaches all the limitations of claims 1, 7, and further, Oh teaches wherein data blocks of at least the second transport channel are only considered

for determining the BLER while data blocks are not received on the first transport channel (*e.g.*, Fig. 1-2, 7, 27:1-25, 155:1-15, 160:1-12).

Regarding claims 3 and 9, Oh teaches all the limitations of claims 1, 7, and further, Oh teaches wherein error rate information corresponding to the data blocks of the at least second transport channel is weighted according to at least one of channel coding (*e.g.*, 27:1-25, 100:1-11), a code rate, rate matching, and a current SIR of the first and second transport channels (*e.g.*, 27:1-25, 100:1-11, 155:1-15).

Regarding claims 4, 10, 17, and 24, Oh teaches all the limitations of claims 1, 7, 15, 22, and further, Oh teaches wherein the BLER is determined according to cyclic redundancy check (CRC) information (*e.g.*, 28:1-10, 128:1-7).

Regarding claims 5, 11, 18, and 25, Oh teaches all the limitations of claims 1, 7, 15, 22, and further, Oh teaches wherein the reference SIR is adjusted so that the BLER approaches the target BLER (*e.g.*, 75:1-17, 76:1-8, 124:1-11).

Regarding claims 6, 12, 21, and 28, Oh teaches all the limitations of claims 1, 7, 15, 22, and further, Oh teaches comparing the reference SIR value to at least one other reference SIR value corresponding to another transport channel; and selecting a maximum one of the compared reference SIR values to be used for controlling power (*e.g.*, 76:1-8, 77:1-6, 78:1-2, 79:1-2, 80:1-6, 81:1-6).

Regarding claims 16 and 23, Oh teaches all the limitations of claims 15, 22, and further, Oh teaches wherein the estimated BLR is used to maintain a constant rate of change of the determined reference SIR value for different estimated BLRs (*e.g.*, Fig. 1-2, 7, 101:1-16, 103:1-8, 155:1-15).

Regarding claims 19 and 26, Oh teaches all the limitations of claims 15, 22, and further, Oh teaches wherein the reference SIR is only considered for controlling power if the estimated BLR corresponds to at least a minimum channel excitation level (*e.g.*, 76:1-8, 77:1-6, 78:1-2, 79:1-2, 80:1-6, 81:1-6).

Regarding claims 20 and 27, Oh teaches all the limitations of claims 19, 26, and further, Oh teaches wherein the channel excitation level is determined based on a product of the estimated BLR and the target BLER (*e.g.*, 6:1-26, 101:1-16, 103:1-8, 155:1-15).

Conclusion

The prior art made of record considered pertinent to applicant's disclosure, see PTO-892 form.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shaima Q. Aminzay whose telephone number is 571-272-7874. The examiner can normally be reached on 7:00 AM -4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mathew D. Anderson can be reached on 571-272-4177. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/SHAIMA Q. AMINZAY/
Examiner, Art Unit 2618

March 10, 2009

/Matthew D. Anderson/
Supervisory Patent Examiner, Art Unit 2618